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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MORGAN, LEWIS & BOCKIUS, LLP. 2 PALO ALTO SQUARE 3000 EL CAMINO REAL PALO ALTO, CA 94306			BORISSOV, IGOR N	
			ART UNIT	PAPER NUMBER
			3639	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/629,891	GILBERT ET AL.	
	Examiner	Art Unit	
	Igor Borissov	3639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 29 July 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-25 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-23 and 25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention is not within the technological arts.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful,

concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

*The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.*

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement

issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

Contrary to the claims in the above-cited cases, in the present application, the claims are completely silent with regard to technology and is purely an abstract idea or process steps that are employed completely without the use of any technology whatsoever. The method claims are no more than a suggested idea of trading energy commitments upon demands. The claims are completely devoid of any means to carry out a process implementing the steps of: *receiving, solely for trading, a plurality of multi-year energy commitments; providing consideration for each of said multi-year energy commitments; and trading at least one of said plurality of energy commitments upon demand.*

Section 100 (b) of Title 35 U. S. C. defines "process" to mean "process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material." "When Congress approved the addition of the term "process" to the categories of patentable subject matter in 1952, it incorporated the definition of "process" that had evolved in the courts" (footnotes omitted). See *In re Schrader*, 22 F. 3d 290, 295, 30 USPQ2d 1455, 1459 (Fed. Cir. 1994), which included this definition from *Cochrane v. Deener*, 94 U. S. 780, 788 (1877): "A process is ... an

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act, or series of acts, performed upon the subject matter to be transformed and reduced to a different state or thing."

Claims in the present application do not transform any physical subject matter or tangible (matter) into a different state of thing, and can be performed manually by a human.

The examiner recognizes that a statutory "process" under § 101 does not have to be performed by a machine, there must be a transformation of physical subject matter from one state to another, e.g., a step of "mixing" two chemicals transforms two separate chemicals into a manufacture or a composition of matter, regardless of whether it is performed by a human or a machine.

Claims in the present application do not recite transformation of physical subject matter.

The examiner further recognizes that "subject matter" transformed does not need to be a physical (tangible) object or article or substance. Under the *State Street* test transformation of electrical signals into a different state or signal within a computer could constitute a machine implementation if the result has some practical utility.

However, in accordance with MPEP 2106 (IV)(B)(2)(b) "Statutory Process Claims", not all processes are statutory under 35 U.S.C. 101. *Schrader*, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed computer related process must either: (A) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application within the technological arts. See *Diamond v. Diehr*, 450 U.S. at 183-184, 209 USPQ at 6 (quoting *Cochrane v. Deener*, 94 U.S. 780, 787-788 (1877)). The claims in the present application do not appear to satisfy either of the two conditions listed above. First, the claims do not include limitations that would suggest a computer is being used to transform the data from one form to another that would place the invention in the technological arts. Second, disregarding the fact that there is no computer claimed that would physically transform the data, there does not appear to be any physical transformation of data. Thus, there neither appears to be any physical transformation of

data from one form to another, which is based upon an algorithm or a calculation by a computer or processor, nor is there any technology claimed that would be used to transform the data.

As per Claim 25, the computer-readable medium could be understood as merely a sheet of paper with software instructions written on its surface. However, the claimed invention must utilize technology in a non-trivial manner (*Ex parte Bowman*, 61 USPQ2d 1665, 1671 (Bd. Pat. App. & Inter. 2001)). Although Bowman is not precedential, it has been cited for its analysis.

In order to obviate the Claim Rejection under 35 USC 101 for Claim 25, the examiner suggests the following language: “*A computer-readable medium containing program instructions for execution by a computer, which, when executed by the computer cause the computer to implement a method for trading energy commitments to reduce or increase energy consumption, to increase or reduce energy generation, or to deliver energy, comprising:*”

Because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims are not permitted under 35 USC 101 as being related to non-statutory subject matter. However, in order to consider those claims in light of the prior art, examiner will assume that those claims recite statutorily permitted subject matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 24 is rejected under 35 U.S.C. 102(e) as being anticipated by Turbeville et al. (US 2001/0027437).

Turbeville et al. (Turbeville) teaches a system for trading energy commitment, comprising:

Independent Claim

Claim 24.

An entity having: a processor; communications circuitry for communicating with one or more energy market participants, and a memory [0037]; said processor is configured to receive a plurality of energy commitments; provide consideration for each of said energy commitments; trade at least one of said plurality of energy commitments upon demand [0048]; [0051]; [0079]. Language as to "*multi-year energy commitments*" indicates intended use of said system, and does not recite a structural limitation; and, therefore, is given no patentable weight. MPEP 2106 (II) (C) states: "*Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.*"

Furthermore, Claims Directed to an Apparatus must be distinguished from the prior art in terms of structure rather than function, *In re Danly* 263 F.2d 844, 847, 120 USPQ 528-531 (CCPA 1959). A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (bd Pat. App. & Inter. 1987). Thus the structural limitations of Claim 24 are disclosed in Turbeville as described herein. Also, as described, the limitations of the Claim do not distinguish the claimed apparatus from the prior art.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-8, 16-20 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turbeville et al.

Turbeville teaches a computer-implemented method for trading energy commitment, comprising:

Independent Claims

Claims 1 and 25.

Receiving a plurality of energy commitments [0048];
providing consideration for each of said energy commitments [0051];
trading at least one of said plurality of energy commitments upon demand [0051];
[0079].

Turbeville does not specifically teach that said energy commitments are *multi-year* energy commitments. However, Turbeville does teach that said energy commitments includes specified delivery time and intervals [0042]. Therefore, it would have been obvious to one having ordinary skill in art the time the invention was made to modify Turbeville to include that said energy commitments are *multi-year* energy commitments, because it would advantageously allow the trading parties to plan their production for extended time period.

Dependent Claims

Claim 5. Said method, wherein said consideration comprises a loan [0207].

Claim 6. Said method, wherein said consideration comprises a fixed-minimum monetary payment [0051].

Claim 7. Said method, wherein said consideration further comprises an payment based on market conditions [0051]. Market conditions indicates fluctuation of prices, and, accordingly, fluctuation (increase or decrease) in the payment amount.

Claim 8. Said method, comprising, prior to said receiving, selecting said plurality of multi-year commitments to minimize a financial risk relative to said consideration [0049].

Claims 16-18. Said method, further comprising evaluating the viability of said multi-year energy commitments [0049]; [0012].

Claim 19. Said method, further comprising combining, prior to said trading, at least two of said multi-year energy commitments into a product [0049]; [0051].

Claim 20. Said method, wherein said receiving comprises receiving at least one of said multi-year energy commitments from an aggregator of said multi-year commitments [0051].

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turbeville et al. in view of Fukui et al. (US 2001/0025209).

Dependent Claim

Claim 2. Turbeville teaches all the limitations of Claim 2, except specifically teaching that said received energy commitments include commitments to *reduce energy consumption* upon demand.

Fukui et al. (Fukui) teaches a method for purchasing electric power from a plurality of electric-power suppliers and supplying an optimum amount of electric power to each of a plurality of customers, wherein the customers are committed to *reduce the energy consumption* (Fig. 9; [0059]; [0048]).

It would have been obvious to one having ordinary skill in art the time the invention was made to modify Turbeville to include that said received energy commitments include commitments to *reduce energy consumption* upon demand, as disclosed in Fukui, because it would advantageously allow to reduce the amount of electrical energy purchased collectively by the customers, as specifically stated in Fukui [0005].

Claims 3, 4 and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turbeville et al. in view of Germer et al. (US 4,199,717).

Dependent Claims

Claim 3. Turbeville teaches receiving a plurality of multi-year supply response commitments for energy generation upon demand [0048]; [0079]. Turbeville does not specifically teach that said commitments for energy generation includes commitments to increase energy generation.

Germer et al. (Germer) teaches a method for delivering contracted electric power to customers, wherein utility companies add additional power generating capacity on demand (C. 1, L. 11, 17-22).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Turbeville to include that said commitments for energy generation includes commitments to *increase* energy generation, as disclosed in Germer, because it would advantageously allow to avoid blackouts during peak power periods.

Claims 4, 9-12 and 15. Germer teaches said method, wherein said plurality of multi-year energy commitments comprise energy commitments to increase energy generation during specific time periods (C. 1, L. 11, 17-22). The motivation to combine Turbeville and Germer would be to avoid blackouts during peak power periods.

Claim 13. Turbeville teaches a plurality of multi-year energy commitments to provide energy generation in geographically different areas [0046]. Germer teaches that said plurality of multi-year energy commitments comprise energy commitments to increase energy generation during specific time periods (C. 1, L. 11, 17-22). The motivation to combine Turbeville and Germer would be to avoid blackouts during peak power periods.

Claim 14. Turbeville teaches a plurality of multi-year energy commitments to provide energy generation by a plurality (different) energy providers [0048]. Germer teaches that said plurality of multi-year energy commitments comprise energy commitments to increase energy generation during specific time periods (C. 1, L. 11,

17-22). The motivation to combine Turbeville and Germer would be to avoid blackouts during peak power periods.

Claims 21, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turbeville in view of Fukui and further in view or Germer.

Independent Claims

Claim 21. Turbeville teaches said method, comprising:

receiving a plurality of energy commitments to reduce or increase energy consumption, to increase or reduce energy generation, or to delivery energy by a predetermined quantity upon demand [0048]; [0079];

providing consideration for each of said energy commitments [0051];

combining at least a portion of at least two of said energy commitments to form a product [0051];

trading said product upon request [0051].

Turbeville does not specifically teach that said energy commitments are *multi-year* energy commitments. However, Turbeville does teach that said energy commitments includes specified delivery time and intervals [0042]. Thereby, it would have been obvious to one having ordinary skill in art the time the invention was made to modify Turbeville to include that said energy commitments are *multi-year* energy commitments, because it would advantageously allow the trading parties to plan their production for extended time period.

Also, Turbeville does not specifically teach that said received energy commitments include commitments to *reduce energy consumption* upon demand. Also, Turbeville does not specifically teach that said commitments for energy generation includes commitments to *increase energy generation*.

Fukui teaches a method for purchasing electric power from a plurality of electric-power suppliers and supplying an optimum amount of electric power to each of a plurality of customers, wherein the customers are committed to reduce the energy consumption (Fig. 9; [0059]; [0048]).

Germer teaches a method for delivering contracted electric power to customers, wherein utility companies add additional power generating capacity on demand (C. 1, L. 11, 17-22).

It would have been obvious to one having ordinary skill in art the time the invention was made to modify Turbeville to include that that said received energy commitments include commitments to reduce energy consumption upon demand, as disclosed in Fukui, because it would advantageously allow to reduce the amount of electrical energy purchased collectively by the customers, as specifically stated in Fukui [0005]. And it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Turbeville and Fukui to include that said commitments for energy generation includes commitments to *increase* energy generation, as disclosed in Germer, because it would advantageously allow to avoid blackouts during peak power periods.

Claim 22. Turbeville teaches said method, comprising:

receiving a plurality of unsolicited offers for energy commitments to reduce or increase energy consumption, to increase or reduce energy generation, or to deliver energy by a predetermined quantity upon demand [0048]; [0079];

accepting said plurality of offers [0051];

providing consideration for each of said energy commitments [0051];

combining at least a portion of at least two of said energy commitments to form a product [0051];

trading said product upon request [0051].

Turbeville does not specifically teach that said energy commitments are *multi-year* energy commitments. However, Turbeville does teach that said energy commitments includes specified delivery time and intervals [0042]. Thereby, it would have been obvious to one having ordinary skill in art the time the invention was made to modify Turbeville to include that said energy commitments are *multi-year* energy commitments, because it would advantageously allow the trading parties to plan their production for extended time period.

Also, Turbeville does not specifically teach that said received energy commitments include commitments to *reduce energy consumption* upon demand. Also, Turbeville does not specifically teach that said commitments for energy generation includes commitments to *increase energy generation*.

Fukui teaches a method for purchasing electric power from a plurality of electric-power suppliers and supplying an optimum amount of electric power to each of a plurality of customers, wherein the customers are committed to reduce the energy consumption (Fig. 9; [0059]; [0048]).

Germer teaches a method for delivering contracted electric power to customers, wherein utility companies add additional power generating capacity on demand (C. 1, L. 11, 17-22).

It would have been obvious to one having ordinary skill in art the time the invention was made to modify Turbeville to include that that said received energy commitments include commitments to reduce energy consumption upon demand, as disclosed in Fukui, because it would advantageously allow to reduce the amount of electrical energy purchased collectively by the customers, as specifically stated in Fukui [0005]. And it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Turbeville and Fukui to include that said commitments for energy generation includes commitments to *increase energy generation*, as disclosed in Germer, because it would advantageously allow to avoid blackouts during peak power periods.

Dependent Claim

Claim 23. Said method, wherein said receiving comprises receiving a plurality of multi-year demand response commitments from a plurality (separate) of energy consumers which appear do not have energy generation capabilities [0048].

Furthermore, information as to "wherein said energy consumers *do not have energy generation capabilities*" is non-functional language and given no patentable weight. Non-functional descriptive material cannot render non-obvious an invention that would otherwise have been obvious. See: *In re Gulack* 703 F.2d 1381, 1385, 217

USPQ 401, 404 (Fed. Cir. 1983) In re Dembiczak 175 F.3d 994, 1000, 50 USPQ2d 1614, 1618 (Fed. Cir. 1999). The specific example of non-functional descriptive material is provided in MPEP 2106, Section VI: (example 3) a process that differs from the prior art only with respect to non-functional descriptive material that cannot alter how the process steps are to be performed. The method steps recited in Claims 22 and 23 would be performed the same regardless of *energy generation capabilities* of said energy consumers.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see form PTO-892).

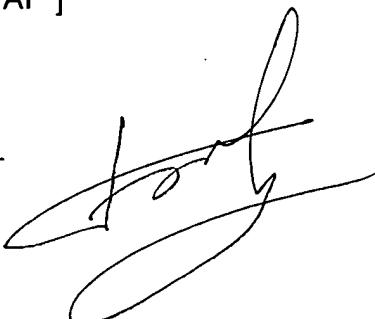
Any inquiry concerning this communication should be directed to Igor Borissov at telephone number (571) 272-6801. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John Hayes, can be reached at (571) 272-6708. Any response to this action should be mailed to:

**Commissioner of Patents and Trademarks
Washington D.C. 20231**

or faxed to:

(703) 872-9306 [Official communications; including After Final communications labeled "Box AF"]

Igor Borissov
Patent Examiner
Art Unit 3639



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